REMARKS

Applicant respectfully requests the Examiner's reconsideration of the present application as amended. Claims 1 and 12 are amended. Claims 1-22 remain in the application.

35 U.S.C. § 102 Rejection

Claim 1, 4, 9, 12, 15, 22 are rejected under 35 U.S.C. 102 (e) as being anticipated by the U.S. Patent No. 6,473,897 of Ansari et al. Applicant respectfully submits that Ansari (col. 11, lines 6-8; FIG. 50; col. 5, lines 46-55 and col. 5., lines 66 to col. 6, line. 3) does not teach the subject matter as claimed in claims 1, 4, 9, 12, 15, 22 of the instant application.

Ansari discloses a computer-implemented method in which:

1) A compiler identifies a number of functions that can be optimized depending upon the number of CPU types that are potentially used to execute the object code;
2) Then the compiler compiles the high-level codes into different versions of assembly codes (col. 5 lines 46-55);
3) A determination is made whether generating customized sections of object code for the source code segment to execute on each of the plurality of different processor types, respectively, provides a performance advantage over generating a un-customized version of object code; and
4) If so, the assembly code is converted to machine-executable object code. (col. 5 line 56-66).

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Specifically, Ansari discloses a process of converting high-level codes into mid-level assembly codes (col. 5 lines 4-6) that are converted into machine-executable object codes.

Ansari does not disclose an abstract routine generator for receiving a data stream comprising a multimedia routine and for outputting a generic abstract representation thereof during runtime; and a translator for said abstract routine generator for receiving said abstract representation and for outputting processor specific code translated from said abstract representation for processing multimedia input data during said runtime.

In addition, Ansari teaches (Claim 1) in a necessary step of determining whether generating customized sections of object code for the source code segment to execute on each of the plurality of different processor types, respectively, would provide a performance advantage over generating an un-customized version of object code and if so, generating object code for the source code segment, including generating a plurality of sections for the source code segment customized for one of the plurality of different processor types, and generating a control section that causes a selected one of the plurality of sections to be called during execution of the object code in accordance with an executing processor's processor type.

In contrast, the subject matter of Claims 1, 4, 9, 12, 15, 22 of the instant application does not require such a determination step.

The subject matter of Claims 1, 4, 9, 12, 15, 22 of the instant application relates to an abstract routine generator for receiving a data stream comprising a multimedia routine and for outputting a generic abstract representation thereof during runtime; and

a translator for said abstract routine generator for receiving said abstract representation and for outputting processor specific code translated from said abstract representation for processing multimedia input data during said runtime. The abstract routine generator generates an abstract representation of the code, commonly in the form of a directed acyclic graph during runtime. For example, the bi-directional MPEG 2 motion compensation can be implemented using a set of sixty-four different but very similar routines, that can be generated by a loop in the abstract image generator.

The generated, output and translated abstract representation of the code that is claimed and disclosed in the instant invention is patentably distinct from the high level codes, intermediate level codes and machine-executable object codes as disclosed in Ansari. Accordingly, Ansari does not anticipate the claimed invention.

Thus, the withdrawal of the rejection under 35 U.S.C. § 102 (e) is respectfully requested.

35 U.S.C. § 103 Rejection

1) Claim 2 and 13 are rejected under 35 U.S.C 103 (a) as being unpatentable over Ansari et al. (USPN, 6,473,897).

Ansari claims and discloses a computer-implemented method to be performed by a compiler comprising: analyzing a source code segment which is to be customized to a plurality o different processor types; determining whether generating customized sections of object code for the source code segment to execute on each of the plurality of different processor types, respectively, would provide a performance advantage over generating a on-customized version of object code; and If so, generating object code for the source code segment, including generating a plurality of sections for the source

code segment, each of the plurality of section s being object code for the source code segment customized for one of the plurality of different processor types, and generating a control section that causes a selected one of the plurality of sections to e called during execution of the object code in accordance with an executing processor's processor type.

Ansari does not teach or suggest an abstract routine generator for receiving a data stream comprising a multimedia routine and for outputting a generic abstract representation thereof during runtime; and a translator for said abstract routine generator for receiving said abstract representation and for outputting processor specific code translated from said abstract representation for processing multimedia input data during said runtime.

Ansari does not teach or suggest an abstract routine generator for receiving a data stream comprising a multimedia routine and for outputting a generic abstract representation thereof during runtime; and a translator for said abstract routine generator for receiving said abstract representation and for outputting processor specific code translated from said abstract representation for processing multimedia input data during said runtime. Thus, a person skilled in the art would not be able to make the claimed invention with reference to Ansari.

Thus, the withdrawal of the rejection under 35 U.S.C. § 103 (a) is respectfully requested.

2) Claims 3, 7, 8, 14, 16, and 17 under 35 U.S.C. §103(a) as being unpatentable over Ansari (U.S. Pat. No. 6,473,897) in view of Benson (U.S. Pat. No. 5,307,492).

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The rejection of Claims 3, 7, 8, 14, 16, and 17 under 35 U.S.C. §103(a) is deemed moot in view of Applicant's comments concerning Claims 1 and 12 above. Claims 3, 7, 8, and 14, 16, 17 are dependent upon Claims 1 and 12, respectively, which are in allowable condition.

Therefore, Applicant respectfully requests that the Examiner withdraw the rejection under 35 U.S.C. §103(a).

3) Claims 5, 6, 18, and 19 under 35 U.S.C. §103(a) as being unpatentable over Ansari (U.S. Pat. No. 6,473,897) in view of Gelissen (U.S. Pat. No. 5,854,927).

The rejection of Claims 5, 6, 18, and 19 under 35 U.S.C. §103(a) is deemed moot in view of Applicant's comments concerning Claims 1 and 12 above. Claims 5, 6, and 18, 19 are dependent upon Claims 1 and 12, respectively, which are in allowable condition.

Therefore, Applicant respectfully requests that the Examiner withdraw the rejection under 35 U.S.C. §103(a).

4) Claims 10 and 20 under 35 U.S.C. §103(a) as being unpatentable over Ansari (U.S. Pat. No. 6,473,897) in view of Abdallah (U.S. Pat. No. 6,502,115).

The rejection of Claims 10 and 20 under 35 U.S.C. §103(a) is deemed moot in view of Applicant's comments concerning Claims 1 and 12 above. Claims 10 and 20 are dependent upon Claims 1 and 12, respectively, which are in allowable condition.

Therefore, Applicant respectfully requests that the Examiner withdraw the rejection under 35 U.S.C. §103(a).

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5) Claims 11 and 21 under 35 U.S.C. §103(a) as being unpatentable over Ansari (U.S. Pat. No. 6,473,897) in view of Okuda (U.S. Pat. No. 6,493,467).

The rejection of Claims 11 and 21 under 35 U.S.C. §103(a) is deemed moot in view of Applicant's comments concerning Claims 1 and 12 above. Claims 11 and 21 are dependent upon Claims 1 and 12, respectively, which are in allowable condition.

Therefore, Applicant respectfully requests that the Examiner withdraw the rejection under 35 U.S.C. §103(a).

Applicant has amended Claims 1, and 12. It should be noted that Applicant has elected to amend said Claims solely for the purpose of expediting the patent application process in a manner consistent with the PTO's Patent Business Goals, 65 Fed. Reg. 54603 (9/8/00). In making this amendment, Applicant has not and does not in any way narrow the scope of protection to which Applicant considers the invention herein to be entitled. In addition, Applicant does not concede, in any way, that the subject matter of such claim was in fact taught or disclosed by the cited prior art. Rather, Applicant reserves Applicant's right to pursue such protection at a later point in time and merely seeks to pursue protection for the subject matter presented in this submission.

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SUMMARY

Claim 1 and 12 are amended. Claims 1-22 are pending. No new matter has been added. Applicant respectfully submits that, in view of the amendments and discussion set forth herein, the pending claims are patentable over the prior art.

The examiner is invited to call Michael Glenn or Ivy Lee May at 650-474-8400 to discuss the pending claims.

Respectfully Submitted,

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